

REMARKS

Claim rejections under 35 USC 112

Claims 1-23 have been rejected under 35 USC 112, second paragraph, as being indefinite. In particular, the Examiner has noted that claim 1 provides a method of focus control, but does not recite how such focus control is achieved via active, positive steps, acts, or parts. Applicant has therefore amended claim 1 to include the limitations of claim 2, and has cancelled claim 1. In particular, after a light source beam is passed over a reflectivity change, and after a change time and a current light source spot size are determined, the method now adjusts a focus actuator to achieve a desired spot sized based on the current light source spot size. As such, claim 1 now includes an active, positive step, act, or part by which focus control is achieved. Therefore, Applicant respectfully requests the withdrawal of this rejection.

Claim rejections under 35 USC 102

Claims 1-5, 7, 9-10, and 18-23 have been rejected under 35 USC 102(b) as being anticipated by Niwayama (5,363,357). Claims 1 and 19 are independent claims, from which the remaining claims rejected on this basis ultimately depend. Claim 19 and claims 20-22 that depend therefrom have been cancelled without prejudice. Claim 23 has been amended to recite different limitations and to depend from claim 1 instead of from claim 19. Applicant submits that claim 1 is patentable over Niwayama, such that the claims that depend therefrom are patentable for at least the same reasons.

Applicant respectfully submits that here has been some confusion as to what claim 1 is directed vis-à-vis what Niwayama discloses. Claim 1 determines a *change time* of a reflectivity step function, and then determines a *current light source spot size* using this change time determined as well as a storage media velocity. As a graphical example, consider FIGs. 6A-6E of

the patent application as filed. What the claimed invention determines in this example is the fall time T_F and/or the rise time T_R . (See also p. 8, para. [24])

Now, the Examiner has stated that Niwayama discloses determining the change time of a reflectivity step function in FIGs. 9A-9C, and discloses determining a current light source spot size using the change time and the storage media velocity in column 9, lines 29-62. Applicant respectfully disagrees. FIGs. 9A and 9C in particular do show a reflectivity step function that has a change time specifically called out as region B in FIG. 9A.

However, Niwayama *never actually determines this change time* (inherently or explicitly). Applicant respectfully submits that it is telling that the Examiner could not find any reference to the specification of Niwayama discussing determination of this change time, since indeed Niwayama does not ever discuss determining change time. FIGs. 9A-9C of Niwayama are presented simply so that “the principle of operation and features of this embodiment will be explained in connection with the waveform diagrams of FIGs. 9A-9C.” (Col. 9, ll. 1-3) However, just because Niwayama shows the change time of a reflectivity step function in these waveform diagrams does not mean that Niwayama *actually determines* this change time, as in the claimed invention. Indeed, the change time is never referenced in Niwayama in any way (such as a time T_F or T_R as in the patent application as filed, for instance), which leads to the conclusion that if Niwayama never discusses change time, then Niwayama cannot be considered as determining change time (i.e., would not Niwayama say *somewhere* that it is determining change time if indeed it is determining change time?). For this reason alone, Niwayama does not anticipate the claimed invention.

Furthermore, Niwayama *never actually uses change time to determine the current light source spot size*. Rather, Niwayama is concerned with *velocity or slope* as the basis upon which current light source spot size is determined. Thus, “the output of the differentiator 21 for this slope section [in FIG. 9A] is virtually proportional to the relative velocity between the objective lens 32 and the disc 1.” (Col. 9, ll. 31-34) “In the region A, if the objective lens 32 approaches

the disc surface at an increased velocity by some reason, the differentiator 21 has its output increasing in the positive direction.” (Col. 9, ll. 45-49) “In this manner, *the system performs a sort of velocity control for the relative movement between the objective lens 32 and disc 1.*” (Col. 9, ll. 58-61) That is, determining the current light source spot size to achieve focus control is implemented in Niwayama by detecting/determining *velocity* (via *slope*), and not the actual *change time*, as in the claimed invention. In FIGs. 9A-9C, for instance, this is achieved by looking at the *slope* of the lines in question, as opposed to the actual distance of region B. Because Niwayama does not determine the current light source spot size using *change time*, for this reason as well, Niwayama does not anticipate the claimed invention.

Claim rejections under 35 USC 103

Claims 6 and 8 have been rejected under 35 USC 103(a) as being unpatentable over Niwayama. Claims 11-16 have been rejected under 35 USC 103(a) as being unpatentable over Niwayama in view of Ito (5,608,717). Claims 17 and 24 have been rejected under 35 USC 103(a) as being unpatentable over Niwayama in view of Anderson (2003/0179674).

Claims 6, 8, 11-16, and 17 are dependent claims depending from claim 1, and therefore are patentable at least because they depend from an allowable independent claim, as has been discussed above. Claim 24 is an independent claim that has substantially similar limitations to those of claim 1 as discussed above. Therefore, insofar as claim 1 is patentable, claim 24 is likewise patentable.

Conclusion

Applicants have made a diligent effort to place the pending claims in condition for allowance, and request that they so be allowed. However, should there remain unresolved issues that require adverse action, it is respectfully requested that the Examiner telephone Mike Dryja, Applicants' Attorney, at 425-427-5094, so that such issues may be resolved as expeditiously as possible. For these reasons, this application is now considered to be in condition for allowance and such action is earnestly solicited.

Respectfully Submitted,



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